

REMARKS

Claims 1-21 are pending in the action, with claim 1 being independent. Applicants have cancelled claims 22-26 and 31-45 without prejudice as being directed to non-elected invention(s). The right to file the canceled claims in a divisional application is hereby reserved.

Applicants have amended claims 1-3 and 7. Support for these amendments can be found, for example, at paragraph [0048] and in FIG. 4 of the present specification. Thus, these amendments add no new matter.

Claims 1-21 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by US Pub. No. 2001/0047127 to **New Jr. et al.**, ("**New**"). These rejections are respectfully traversed. Reconsideration and allowance of the present application are respectfully requested in light of the following comments and remarks.

Restriction

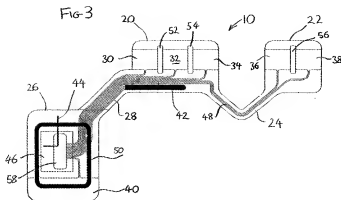
Applicants confirm their election of Group I directed to claims 1 to 21, and have cancelled the remaining claims in this application.

Section 102(b)

Claims 1-21 have been rejected as allegedly being anticipated by **New**. Applicants respectfully traverse this rejection for the following reasons.

Claim 1, as amended, recites in part a flexible strip having a first conductive lead connecting to an area of resistive material, the area of the resistive material being formed using conductive ink and on an arched portion of the flexible strip for setting a neutral resistance from which electrical resistance is measured as the flexible strip is flexed.

In the statement of rejection, the Office alleges that FIG. 3 of **New** shows the claimed arched portion. *See* page 4, lines 1-3 of the Official Action.



Referring to FIG. 3 above, New illustrates a sensor device 10 that includes a physiological sensor 42 having a flexible non-conductive substrate on which a strip of conductive ink material is mounted (*see* [0040] in New). Applicants respectfully submit that New's sensor device 10 does not show the claimed arched portion. While New's sensor device 10 may include a bend sensor 42 that has a U-shape, nothing in New indicates the presence of the claimed arched portion. New's bend sensor 42 is a flat elongate member that in some embodiments includes a flat strip of conductive material in the shape of a "U." A flat object, however, does not have any height dimension, and thus cannot form an arch. It is respectfully submitted that there is no support by which to conclude that New's sensor device 10 includes a portion whose curvature structurally resembles or simulates the claimed arch portion. Nor is there any disclosure of spatial properties or dimensions to support the Office's reading of New's bend sensor as an arched object. At best, New's bend sensor can be bent. Bending alone, however, furnishes no new structural or physical properties that would span a space to the bent object while supporting the bent object's weight. On the other hand, Applicants' claimed flexible strip that comprises an arched portion, is always arched as shown, for example, in FIGs. 4, and 9 to 12. This arch allows the unstressed resistance to be set and a greater range of resistance values to be measured from different deformations of the arch. *See* [0048] of the present specification. Applicants respectfully submit that New does not show any arched portion in FIG. 3, and certainly does not show any bend sensor 42 that is arched. To the contrary and as discussed above, New's bend sensor 42 is completely flat, not arched, as shown in FIG. 3.

Further, the Office reads New's web 28 as the claimed flexible strip. *See* page 3, item 3, line 14 of the Official Action. However, nothing in paragraph [0040] indicates that New's web

28 is the claimed flexible strip. Like New's conductive tracks 48, New's web 28 is a batch of conductive tracks formed by metalized ink, but itself is not a strip. There is also no disclosure that the electrical resistance of the sensor device 10 varies as New's web 28 is flexed, as recited in claim 1.

Similarly, while New describes the use of conductive ink tracks 48 that are U-shaped (*see* [0053]), there is no teaching or suggestion that the flexible substrate on which the conductive ink tracks 48 are formed is arched. New's flexible substrate is leveled, not raised, and accordingly, cannot (and certainly does not) have an arched portion.

For at least the foregoing reasons, Applicants respectfully submit that New does not anticipate claim 1, as amended. Claim 2-21 depend from claim 1, and also are submitted to be allowable for at least the reasons set forth above with respect to claim 1.

Claim 4

Claim 4 is also allowable for the following additional reasons. Claim 4 recites a flexible strip that is a film laminated to a stiffer base layer using a flexible adhesive.

In the statement of rejection, the Office alleges that paragraph [0040] of New discloses these features. *See* page 4, lines 6-8 of the Official Action.

Paragraph [0040] of New describes the physical structure of New's sensor device 10, which includes a bend sensor 42 having a flexible non-conductive substrate on which conductive materials can be formed.

As a preliminary matter, Applicants respectfully submit that New does not teach or suggest the claimed film in paragraph [0040]. The Office reads New's web 28 as the claimed flexible strip. *See* page 3, item 3, line 14 of the Official Action. However, nothing in paragraph [0040] indicates that New's web 28 is a laminated film. Like New's conductive tracks 48, New's web 28 is a batch of conductive tracks formed by metalized ink. There is, however, no written support to conclude that New's web 28 can be provided in the form of a laminated film.

Nor is there any teaching or suggestion of laminating New's web 28 onto a stiffer base layer using the claimed flexible adhesive. Applicants respectfully submit that paragraph [0040]

is completely silent on the use of any adhesive (let alone a flexible adhesive). Paragraph [0040] speaks of the resistive sensor 42 and its proximity to the web 28, but otherwise provides no discussion on the structure of New's web 28, or how New's web 28 is formed on the sensor device 10.

For at least the foregoing reasons, Applicants respectfully submit that New does not anticipate claim 4.

Claim 6

Claim 6 is also allowable for the following additional reasons. Claim 6 recites an area of resistive material that has a rectangular shape with an upper surface area less than half a square centimeter.

As a preliminary matter, the Office has not identified where these features are taught or suggested in New, rendering the rejection difficult to address. *See* page 4, lines 12-14 of the Official Action. Nevertheless, it is respectfully submitted that nowhere is the size of the shape of the resistive sensor 42 disclosed in New. While New discloses the impedance range of the resistive sensor 42 (*see* [0053]), there is no teaching or suggestion of the size of the shape of the resistor sensor 42 that yields the impedance range.

For at least the foregoing reasons, Applicants respectfully submit that New does not anticipate claim 6.

Claim 8

Claim 8 is also allowable for the following additional reasons. Claim 8 recites a carrier including a central housing for electronics, two extensions from the central housing carrying external sensors, and a harness.

In the statement of rejection, the Office alleges New provides "a central housing 26 for the electronics, two extensions 20 and 22 . . . , and a harness ('attached to the chest of a human object or patient S')". *See* page 4, lines 17-22 of the Official Action.

Applicants respectfully submit that New's component 26 is a sensor region imprinted on

the sensor device 10, not a housing. Applicants respectfully submit that New's imprinted sensor region 26 does not "house" any electronics. Also, New's components 20 and 22 refer to other additional imprinted sensor regions imprinted on the sensor device 10. There is no teaching or suggestion that New's sensor regions 20 and 22 carry any external sensors. Rather, New's sensor regions 20 and 22 are the actual sensors of the sensor device 10. There is no teaching or suggestion in New of a carrier having two extensions for carrying these sensor regions 20 and 22 or the sensor device 10.

Further, while New describes the attachment of the sensor device 10 to the chest of a human subject, nothing in New teaches or suggests the method of attachment. Nor is there any disclosure of the use of a harness to do so. As shown in FIG. 1, the sensor device 10 is attached to the human without any harness. Absent any showing to the contrary, Applicants respectfully submit that New does not anticipate claim 8.

Claim 20

Claim 20 is also allowable for the following additional reasons. Claim 20 recites in part a respiration sensor that comprises a second flexible strip having a second area of resistive material, wherein the two flexible strips are back-to-back on a single base layer.

In the statement of rejection, the Office points to paragraph [0040] of New as allegedly disclosing these features. *See* page 6, lines 7-11 of the Official Action.

As discussed above, at paragraph [0040], the physical structure of New's sensor device 10 is discussed. While paragraph [0040] describes a resistive sensor 42 on a flexible non-conductive substrate, there is no teaching or suggestion of a second resistive sensor. Nor is there any disclosure of two alleged flexible strips having two different areas of resistive material that are back-to-back on a single base layer. FIG. 4 shows only a single resistive sensor, and does not show two alleged flexible strips as suggested by the Office. Should this rejection be maintained, it is respectfully requested that the Office further explain where the two alleged flexible strips are disclosed in New so as to afford the applicants an opportunity to address the Office's concern.

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For at least the foregoing reasons, Applicants respectfully submit that New does not anticipate claim 20.

Conclusion

It is respectfully requested that all pending claims be allowed over the prior art of record.

The foregoing comments made with respect to the positions taken by the Office are not to be construed as acquiescence with other positions of the Office that have not been explicitly contested. In addition, arguments presented herein for the patentability of a claim should not be understood as implying that no other reasons for the patentability of that claim exist.

For all of the reasons set forth above, it is respectfully submitted that the application is in condition for allowance, an indication of which is respectfully solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call the undersigned at the telephone number shown below.

No fee is believed to be due. If necessary, please charge any shortage in fees due in connection with the filing of this paper to Deposit Account 06-1050 and please credit any excess fees to such deposit account, referencing Attorney Docket No. 00786-0758US1

Respectfully submitted,

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